

REMARKS

This is in response to the Final Office Action mailed on October 21, 2010, in which claims 1-6, 8-11, and 13-26 were rejected. With this Amendment, claims 1, 3, 8, 11, 13, 15, 18, 19 and 22 are amended. Claims 2 and 23 are canceled. Claims 1, 3-6, 8-11, 13-22, and 24-26 remain pending in the present application.

Interview Summary

The Applicant thanks Examiner Evanisko for his participation in a telephone interview with Kimberly S. Zillig, as Applicant's representative, on December 2, 2010. The participants discussed amending the claims, as indicated above. The Applicant submits that the amendments to the claims listed above and the arguments presented below overcome all pending rejections.

Section 112 Rejections

The Office Action rejected claim 18 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claim 18 has been amended herein as indicated above. The rejection of claim 18 is rendered moot by the amendment. Therefore, the Applicant respectfully requests that the rejection be withdrawn.

Further, the Office Action rejected claims 13 and 22 under 35 U.S.C. § 112, second paragraph, as being indefinite to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Office Action states that the phrase in claim 13, "along a helical recess," and the phrase in claim 22, "a helical groove of the piston" are vague (Office Action, p. 2).

The Applicant respectfully believes that the claims as previously presented fully satisfied the requirements of 35 U.S.C. § 112. Nevertheless, without acquiescing to the rejections, the Applicant has amended claims 13 and 22 to expedite prosecution of the case.

Thus, claims 13, 18 and 22 as amended above fully satisfy the requirements of 35 U.S.C. § 112. The Applicant respectfully requests reconsideration and withdrawal of the subject rejections under 35 U.S.C. § 112.

Section 102 Rejections

The Office Action rejected claims 1, 2, 8-10, 19 and 23-26 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,667,686 ("*Peers-Travarton*"). Applicant traverses the rejection.

Independent claims 1, 8 and 19 have been amended as indicated above to clarify that the recess extends "inwardly from the outer surface" of the piston. Claims 1 and 19 have also been amended to clarify that the fixation helix is "coupled with" the piston. The amendments are supported by the specification and claims as originally filed, and do not present new matter. These amendments were discussed in the interview with the Examiner and it was agreed that the included amendments to the claims would overcome the subject rejection under 35 U.S.C. § 102. Thus, *Peers-Travarton* does not disclose all features of amended, independent claims 1, 8 and 19, nor of claims 9-10 and 24-26 that are dependent upon claims 8 or 19. Claims 2 and 23 have been canceled. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 8-10, 19 and 23-26 under 35 U.S.C. § 102.

The Office Action rejected claims 1, 2, 8-10, 14-17, 19 and 23-26 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,531,780 ("*Vachon*"). Applicant traverses the rejection.

Independent claims 1, 8, 15 and 19 have been amended as indicated above to clarify that the recess extends "inwardly from the outer surface" of the piston. Claims 1, 15 and 19 have also been amended to clarify that the fixation helix is "coupled with" the piston. Again, these amendments were discussed in the interview with the Examiner and it was agreed that the included amendments to the claims overcome the subject rejection under 35 U.S.C. § 102. Thus, *Vachon* does not disclose all features of amended, independent claims 1, 8, 15 and 19, or of claims 9-10, 14, 16-17 and 24-26 that are dependent upon the claims. Claims 2 and 23 have been canceled. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 8-10, 14-17, 19 and 23-26 under 35 U.S.C. § 102.

Section 103 Rejections

The Office Action rejected claims 3-6, 11, 13 and 20-22 under 35 U.S.C. § 103(a) as being unpatentable over *Peers-Travarton* in view of U.S. Patent 4,282,885 ("*Bisping*") or U.S. Patent 4,913,147 ("*Fahlstrom*"). Applicant traverses the rejection.

Claims 3-6 depend from claim 1. Claims 11 and 13 depend from Claim 8. Claims 20-22 depend from claim 19. As discussed above, the *Peers-Travarton* reference does not disclose or suggest all features of amended, independent claims 1, 8 and 19. Neither the *Bisping* reference nor the *Fahlstrom* reference cures the deficiencies of *Peers-Travarton* discussed above with regard to the 102 rejection of claims 1, 8 and 19. The *Fahlstrom* reference is not even discussed in the Office Action, and thus it is unclear how the Examiner proposes that the reference could remedy the deficiencies of *Peers-Travarton*. Upon review of *Fahlstrom*, however, the Applicant submits that the reference does not remedy the shortcomings of *Peers-Travarton* discussed above. Accordingly, Applicant respectfully requests withdrawal of the subject 103 rejection.

The Office Action rejected claims 3-6, 11, 13, 18 and 20-22 under 35 U.S.C. § 103(a) as being unpatentable over *Vachon* in view of *Bisping*. Applicant traverses the rejection.

Claims 3-6 depend from claim 1. Claims 11 and 13 depend from Claim 8. Claim 18 depends from claim 15, and claims 20-22 depend from claim 19. As discussed above, the *Vachon* reference does not disclose or suggest all features of amended, independent claims 1, 8, 15 and 19. *Bisping* does not cure the deficiencies of *Vachon* discussed above with regard to the 102 rejection of claims 1, 8, 5 and 19. Applicant respectfully requests withdrawal of this rejection on the grounds discussed above, because the *Bisping* reference does not cure the deficiencies with respect to *Vachon*.

The Office Action rejected claims 14-16 under 35 U.S.C. § 103(a) as being unpatentable over *Peers-Travarton* as discussed above for claims 14-16. Applicant traverses the rejection.

Claim 14 depends from claim 8. Claim 15 is independent and is discussed above. Claim 16 depends from claim 15. As discussed above, the *Peers-Travarton* reference does not disclose or suggest all features of amended, independent claims 8 and 15. Applicant respectfully requests withdrawal of the subject rejection on the grounds discussed above in regard to *Peers-Travarton*.

The Office Action rejected claims 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over *Peers-Travarton* in view of *Bisping*. Applicant traverses the rejection.

Claims 17 and 18 depend from claim 15. As discussed above, the *Peers-Travarton* reference does not disclose all elements of amended, independent claim 15. Applicant respectfully requests withdrawal of the subject rejection on the grounds discussed above, and because the *Bisping* reference does not cure the deficiencies of *Peers-Travarton* noted above with regard to claim 15.

The Office Action rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over modified *Vachon* as discussed above. Applicant traverses the rejection.

Claims 9 and 10 depend from claim 8. As discussed above, the *Vachon* reference does not disclose all features of amended, independent claim 8. Applicant respectfully requests withdrawal of the rejection on the grounds discussed above in regard to *Vachon*.

CONCLUSION

For the reasons explained above, all pending claims are now in condition for allowance. Accordingly, the Applicant respectfully requests that the Office issue a Notice of Allowance.

Any amendments to the claims are made to expedite prosecution of this application, without acquiescing to the Office's rejections or characterizations of the claims or references in the Office Action. Even if not expressly discussed above, the Applicant respectfully traverses each of the rejections, assertions, and characterizations regarding the disclosure and teachings of the cited references, including the prior art status and the propriety of proposed combinations of cited references.

The Applicant has made a good faith effort to respond to all rejections set forth in the Office Action and to place the pending claims in condition for immediate allowance. If it would be helpful, the Examiner is invited to contact the undersigned at the number listed below to facilitate prosecution of this application.

Respectfully submitted,

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